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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,923	09/12/2003	Richard H. Goldbaum	CH2911USNA	8399
23906 7590 01/25/2008 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1122B 4417 LANCASTER PIKE WILMINGTON, DE 19805			EXAMINER NGAMPA, BRIGET P	
			ART UNIT 1792	PAPER NUMBER
			NOTIFICATION DATE 01/25/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-Legal.PRC@usa.dupont.com

Office Action Summary

Application No.

10/661,923

Applicant(s)

GOLDBAUM ET AL.

Examiner

Briget P. Ngampa

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/03, 1/05</u> | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 13-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Raiford et al. (patent number 6,063,474, hereafter '474).

With respect to claim 1: '474 teaches a method for temporarily suppressing the repellency [col 3, line 28] of an extruded or molded object [col 4, line 10], said object comprising a mixture of a polyolefin polymer [col 3, line 31] and a fluorocarbon/hydrocarbon ester [col 3, lines 32-33], comprising heating the object to a temperature of above 40°C [col 6, lines 53-57], holding for at least 10 seconds and cooling to about ambient temperature. The object has a repellency that is lowered (suppressed by heating, see table 2).

With respect to claim 2, '474 teach the heating temperature is above about 60°C and the holding time is above about 1 minute. [Table 2].

The method of claim 3 wherein the heating temperature is from about 70°C to about 150°C and the holding time is from about 1 to about 5 minutes [table 2].

With respect to claim 5, '474 teaches that the object is selected from the group consisting of fibers, filaments, fabrics, films, sheets, nonwoven, molded articles, shaped articles, and solid objects [col 3, lines 48-50].

With respect to claim 6, '474 teach the object being a nonwoven fabric [col 3, lines 56-57].

With respect to claim 13, '474 teaches a method of making extruded or molded objects having a modified surface wherein a fluorocarbon/hydrocarbon ester is added to a polyolefin prior to extrusion or molding [col 3, lines 62-67] wherein the improvement comprises incorporating a heating and cooling step prior to modification of the surface of the object [col 7, example 1].

With respect to claim 14, '474 teach that heating is to a temperature above 40°C for at least 10 seconds [col 8, table 2].

With respect to claim 15, heating is to a temperature of from about 70°C to about 150°C for a time of from about 1 minute to about 15 minutes [col 9, table 2].

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raiford et al. (patent number 6,063,474, hereafter '474) as applied to claims 1-6 above, and further in view of Clark et al. (patent number 6,969,166 B2, hereafter '166).

With respect to claims 7 and 8, '474 teaches modifying a surface of an extruded or molded object, said object comprising a mixture of a polyolefin polymer and a fluorocarbon/hydrocarbon ester [col 7, lines 40-43], comprising heating the object to a temperature of above 40°C for at least 10 seconds [table 2], cooling the object to about ambient temperature. '474 does not teach applying a surface modifier to the object within a period of about 48 hours after said cooling nor does it teach that a surface modifier is selected from the group consisting of printing. '166 teach taking a molded polyolefin and printing on it at room temperature [col 15, lines 23-33]. Therefore, it would have been obvious to one of ordinary skills in the art, at the time the invention was made to have printed the ink of '166 on the molded polyolefin of '474 because it is a known method of further treating a polyolefin object. As far as within 48 hours, processing would have been done within that time in order to expedite processing and

one of ordinary skills in the art understand that expedite processing leads to increase efficiency.

With respect to claim 9, the heating temperature is from about 70°C to about 150°C and the holding time is from about 1 to about 15 minutes [col 8, table 2].

Examiner's Answer

The 112, second paragraph rejection has been withdrawn following applicant's amendment.

Applicant argues that the molded object already possesses surface repellency to low surface tension fluids and that Raiford does not teach suppressing the repellency.

Raiford ('474) teach at column 8, table 2 the result of repellency testing. Table 2 shows the web that resisted penetration (or in other words repellency is suppressed) of isopropyl alcohol/water solution after some time [col 8, lines 9-12]. Applicant argues that example 1 teaches repellency of 90-100 after annealing. Such repellency is achieved after a week. In the short term, the repellency drops to 30 as indicated by table 2.

2. The applicant argues that Clark is printing onto a surface that does not have repellency. Examiner clarifies that Clark cannot be considered alone as reference, Clark needs to be considered in combination with Raiford. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of

references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Briget P. Ngampa whose telephone number is 571-270-1866. The examiner can normally be reached on M-F, 830-430PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bpn


MICHAEL CLEVELAND
SUPERVISORY PATENT EXAMINER